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## The Japanese Macro Polity: Mandate and Accountability Representation in Postwar Japan

This research attempts to delineate the citizen-party-government relationship in postwar Japan, drawing upon the modeling methods that BRANDT and FREEMAN (2009) used to describe the American macro polity. The main focus will be placed on the integration of the mandate and accountability processes in Japan by examining how the Japanese government has reacted to the wishes and actions of the Japanese electorate, and whether it, in response, has rationally reevaluated its support of the government. By conducting an important comparison between these findings and those of the abovementioned analysis of the American macro polity, we suggest that Japan is different because the government's system of policy responsiveness ensures that mandate representation is likely to exist in the country, while accountability representation is limited. Further, we also confirm the link between feedback from government-provided compensation and public opinion.

**KEYWORDS:** public opinion, policy moods, political outcome, macro polity, Bayesian-Structural Vector Autoregressive model, political representation, political accountability, feedback

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## 1. *Introduction*

In a democracy, the communication of the electorate's will to politicians and the fulfillment of politicians' electoral promises are set as central functions (POWELL 2000; MANIN et al. 1999; PITKIN 1967). Political parties endeavor to determine a common, collective set of aggregate voter preferences (STIMSON et al. 1995; STIMSON 1999), and then they make campaign promises in an attempt to win the support of electoral voters. Once a party is elected, it is obliged to deliver upon its policy promises; this is because an incumbent faces a loss of support if it fails to implement its promised policies, and enjoys greater support if it succeeds (FEARON 1999).

Considering this situation, MANIN et al. (1999) subdivided the concept of the electoral representation process into two phases: mandate representation and accountability representation. Mandate representation refers to the extent to which a given electorate's preferences are reflected by party policy positions and government policy outcomes; in contrast, accountability representation refers to the degree of success of the elected ruling party (or parties) in implementing policy promises, which portends future sanctions or rewards from the electorate.<sup>1</sup> Both representation processes have been *separately* analyzed in many works.

These two types of representation have been theoretically defined in conceptual studies; however, they are closely interrelated through a complicated endogenous structure that comprises voter preferences, party policy postures, policy outcomes, and voter reselection (ERIKSON et al. 2002; BRANDT and FREEMAN 2009; JONES 2012). This means that focusing merely on the representation path from voter to politician (mandate), or vice versa (accountability), limits the discussion to the “unilateral” relationship between the two elements selected. Thus, the “cyclical” relationship, which includes voters' judgments concerning the general credibility and reputation of parties and government, must be captured in theoretical and empirical studies.

In order to correctly assess this cyclical representation process, including mandate and accountability, Bayesian structural vector autoregression analysis (hereinafter, B-SVAR) may be helpful; B-SVAR has already been successfully applied to analyze the American macro polity (BRANDT

1. Definitions of mandate representation are provided by PITKIN (1967) and McDONALD and BUDGE (2005), and a definition of accountability representation is provided by FEREJOHN and ROSENBLUTH (2010). Both notions are also well-summarized in CLARK et al. (2008, 689 and 693).

and FREEMAN 2009).<sup>2</sup> Rooted in the work of SIMS and ZHA (1998; 1999), BRANDT and FREEMAN (2009) used B-SVAR to replicate a previous macro polity study conducted by ERIKSON et al. (2002), and argued that the influence of public opinion on policy outcomes is limited. Further, the Brandt and Freeman model (hereinafter, “the BF model”) has made advances in relation to estimating the endogenous relationships between interrelated political-economic variables and identifying the median responses from political shocks and the respective error bands, based on posterior impulse-response functions.

Applying the framework of the abovementioned American macro polity analysis using B-SVAR estimation, this article examines the Japanese macro polity. The case of Japan will prove interesting in the field of comparative political representation studies, as it is a setting in which public opinion, policy outcomes, and political parties’ electoral performances are assumed to be interrelated, and its idiosyncrasies have often been stressed. While many multinational studies of political representation have been conducted, the countries analyzed in most of them are Western democracies. Thus, to date, Japan has been excluded from comparative analyses; this is because a consensus has not been reached among Japanese political scientists in regard to the polls that best capture the electorate’s aggregated policy expectations.<sup>3</sup>

In addition, the pattern of political representation in Japan has occasionally been considered as *perverse accountability*; in this system, voters rely on government compensation and the support received reflects their congruence with the government’s policies (SAITŌ 2010). In opposition to such claims regarding the Japanese system’s idiosyncrasies, other studies

2. Another study analyzed the British macro polity, where the government has broader “room to maneuver” in regard to creating government policy that reflects the public will (SATTLER, FREEMAN, and BRANDT 2008). However, the study’s conclusion that mandate and accountability are limited in the UK is almost the same as that of BRANDT and FREEMAN (2009).

3. In Japan, a variety of survey data has been published, such as that of Japan Election Studies (JES), which shows statistics for individual Japanese voters. Further, the Japanese electorate’s attitude toward parties and the government can be determined by analyzing the findings of the Comparative Study of Electoral Systems (CSES) and Asian Barometer surveys. These surveys are rich resources of data concerning electoral representation; however, the only datasets that are useful for determining the macro dynamics of the Japanese electorate and polity are confined to newspaper and TV companies’ polls. Consequently, there is a lack of agreement even among Japanese researchers in regard to the polls that ought to be used.

have argued that Japanese representation forms a more general pattern, somewhat resembling macro-dynamic representation (OHMURA 2012). By taking a comprehensive approach to examining how the entire mechanism of mandate and accountability functions in Japan, supplementary knowledge concerning this controversial point, that is, whether the mandate and accountability representations somehow function or are distorted properties, could be provided. To achieve this, this research adopts alternative measurements for policy outcomes, not only examining total government spending, but also specific budget areas such as public works projects and welfare policies. Further, to measure public opinion, public policy moods are computed using STIMSON's (1999) algorithm.

Along with considering these concerns, this article aims to (1) simultaneously analyze mandate and accountability representations, and (2) deepen the Japanese representation mechanism. The next section will discuss existing literature concerning mandate representation and accountability representation and will stress that future studies should integrate these two aspects to reveal the cyclical relationships between citizen-party-policy relationships. Meanwhile, in the empirical section, B-SVAR modeling will be explained in full based on its pioneering application by BRANDT and FREEMAN (2009); special care will be devoted to determining the fitness of the B-SVAR approach for this type of research and its particular dataset. Then, variables and model specifications will be discussed and, following a general summary of the findings, the estimation results will be examined in terms of the two aspects of political representation, mandate representation and accountability representation, as well as selection/sanction and feedback. Finally, we offer some conclusions concerning the partial existence of mandate/accountability representation and a selection mechanism, as well as the seemingly existent feedback from policy outcome to public opinion in contemporary Japan.

## *2. Mandate Representation and Accountability Representation*

### 2.1 PREVIOUS RESEARCH ON MANDATE AND ACCOUNTABILITY REPRESENTATION

Political representation is thought to include two major processes: mandate representation and accountability representation (MANIN et al. 1999; ERIKSON et al. 2002; HEALY and MALHOTRA 2013). When analyzing the mandate representation process, researchers must focus on whether the electorate's preferences are reflected in policy outcomes (CLARK et al. 2008,

693); additionally, according to MANIN et al. (1999, 31), mandate representation is actualized “when politicians’ and voters’ interests coincide, when politicians are motivated by the desire to be reelected [...], and when politicians are concerned about the credibility of their future promises.”

STIMSON et al. (1995) laid the foundations for discussions on mandate representation, seeking to confirm whether the public’s aggregated policy preferences, or moods, are reflected in policy outcomes. Moreover, ERIKSON et al.’s (2002) *macro polity* model, which further developed Stimson et al.’s “dynamic representation,” estimated the validity of related models by using over fifty equations, simulating political outcomes, and comparing predicted and observed values.

Subsequently, comparative studies of mandate representation using the (Comparative) Manifesto Project ((C)MP) data as policy outcomes were undertaken with the aim of integrating the spatial theory of party politics and empirical analysis using (C)MP (ADAMS et al. 2004; ADAMS 2012). These comparative studies revealed the conditions under which mandate representation functions, and are determined by considering elements such as the characteristics (mainstream or niche) of parties (ADAMS et al. 2004; 2006; TAVITS 2007), differences in parties’ responses to different groups of voters (opinion leaders or constituencies in general) (ADAMS and EZROW 2009; GILENS 2005), the distribution of voters’ preferences (EZROW 2007), and the effect of electoral systems (EZROW 2010).

Based on the “dynamic representation” of STIMSON et al. (1995) and *The Macro Polity* of ERIKSON et al. (2002), among other early studies of mandate representation, a vast body of literature has emerged on this topic. However, these studies do not embrace the circular relationships within a polity; they underestimate the electorate’s own evaluation of the degree to which mandate representation has been achieved and the incumbent party’s credibility has been met. Thus, to capture this dynamic political process, one must also consider the accountability aspect of representation.

Studies of political accountability, then, have been conducted using both theoretical and empirical approaches. MANIN et al. (1999, 40) defined the conditions under which accountability representation occurs as follows: “when voters vote to retain the incumbent only when the incumbent acts in their best interest, and the incumbent chooses policies necessary to get reelected” (see also FEREJOHN and ROSENBLUTH 2010; CLARK et al. 2008, 689). Building on this conceptual definition, empirical studies have also probed the conditions under which political accountability is met.

Research into accountability representation was first developed with the use of retrospective and economic voting models (HEALY and MAL-

HOTRA 2013; ASHWORTH 2012; ANDERSON 2007; FEREJOHN 1986). Here, these studies stressed the capacity of voters to *sanction* an incumbent for their poor (economic) policy making, a concept based on the assumption that there is a unified voter preference set in concrete and that the incumbents have homogeneous ability (nature) (see MARAVALL 2010). FEARON (1999), in contrast, conducted research that incorporated voter judgment of politicians' heterogeneity, that is, whether the politicians in question are deemed competent or incompetent; further, Fearon's model is capable of capturing both voter selection and the sanctioning of politicians. Following FEARON (1999), scholars developed theories incorporating aspects such as party supporters' dilemmas when forced to choose between two types of candidates who are accountable and who have an equal chance of winning (PADORÓ I MIQUEL and SNOWBERG 2012); the constituency service problem (ASHWORTH 2005); and voters' relationships with politicians who are subject to term limits (FERRAZ and FINAN 2008).

Although a number of such studies of mandate and accountability representations have revealed the actual situations and conditions in which political representation functions, it is still necessary to inclusively examine both types of representation concurrently.<sup>4</sup> This is because, in previous papers, each representation process has been *separately* analyzed, but the ways in which an electorate, parties, and governments—that is, polity—are *contemporaneously* interrelated have not been sufficiently examined. One possible reason for this problem is the empirical difficulty involved in estimating the endogenous relationship between political-economic variables that have complicated lag and contemporaneous structures. In the next section, a possible solution for this problem will be discussed.

## 2.2 INTEGRATING THE MANDATE AND ACCOUNTABILITY PROCESSES

According to the above literature, we can separate the representation process into two distinct sections: mandate and accountability. In a real sense, however, it is problematic to separately analyze these under the assumption that we can starkly deconstruct every part of the process. Public opinion causes policy change and, in turn, policy change may affect government approval and electoral performance. This cyclical and recursive process indicates that *political representation is characterized by endogenous relationships*.

4. For instance, although VLAICU's (2008) theoretical model captures the entire process of mandate and accountability aspects through a principal-agent game theoretical framework, he emphasizes the difference between his own and MANIN et al.'s (1999) concepts.

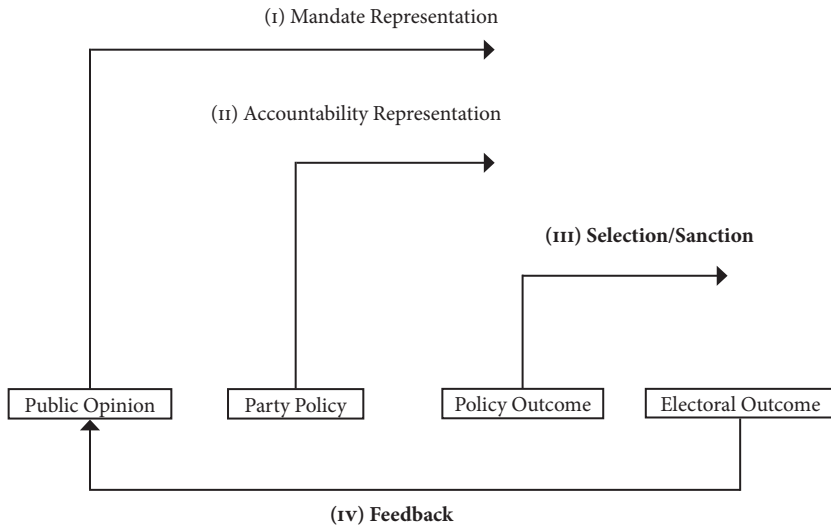


FIGURE 1. Conceptions of political representation.

Relating to this point, ERIKSON et al. (2002, 383–84) state:<sup>5</sup>

[W]e model social outcomes, such as the employment and inflation effects of differential party control of the White House. These effects are all statistically tractable, even though jointly endogenous, by lagged time relationships. But it is quite obvious that they *are* jointly endogenous. Almost all of the dependent variables of one chapter become inputs in another.

This implies that, in earlier studies of political representation, the endogeneity problem and methods of addressing it had already been seriously examined.

According to previous theoretical considerations (MANIN 1999; ERIKSON et al. 2002; CLARK et al. 2008), each part of the mandate and accountability representation processes can be classified and linked, as shown in FIGURE 1. In our context, we can acknowledge four main causal paths

5. Referring to the difficulty of experimental research design, ERIKSON et al. (2002, 384) also contend that “[o]ur formulation, difference equations, has no contemporaneous causation”; however, this setting does not match the one presented in the present article. Since the data are obtained on a yearly basis, some of the decision making, such as that of voters and governments, is recorded at the same time. Thus, when analyzing Japan in this regard, contemporaneous causation among polity variables ought to be considered.

within the entire political representation process: (1) *mandate representation*, which is determined by checking public opinion shocks in response to party policies and party policy outcomes; (2) *accountability representation*, which is determined by examining policy shocks in response to policy outcomes; (3) *the selection/sanction process*, which is determined by analyzing policy and policy outcome shocks in response to the share of seats secured through electoral performances; and (4) *the feedback process*, which is determined by considering policy and policy outcome shocks in response to public opinion.

In order to directly analyze this circular causation, merely solving multiple simultaneous equations to identify endogeneity bias is thought to be insufficient. For instance, simultaneity can be addressed by applying an instrumental variable (IV) method (e.g., JONES 2012). An IV method might correctly assess a particular causal path (e.g., links between public opinion and policy outcomes), but it is not suitable for holistically estimating the entire representation process, including the four types of political processes: mandate, accountability, selection, and feedback. Furthermore, while a certain causal relationship, such as the influence of public opinion and party policy decision-making in a given  $t$ -period, is assumed to be simultaneously determined, voters' reelection of an incumbent/challenger in the  $t + 1$ -period is influenced by government performance during the  $t$ -period. This means that a variety of causal relationships are embodied in a single political representation that is mapped onto a heterogeneous decision-making structure over time. Some of the causal relationships are simultaneous, while in others, lag structures ought to be considered; in other words, it is difficult to divide mandate and accountability representation in each simultaneous equation.

Estimating the citizen-party-government relationship, how can we determine whether both mandate and accountability representations exist in Japan? To achieve this, the present article draws upon the method first developed by SIMS and ZHA (1999), later made more widely applicable by BRANDT and FREEMAN (2009) with the development of a software package, B-SVAR, which they used for macro political modeling and estimation. Specifically, building on SIMS's basic idea that "politics is an aid to identification" (1987, 298), BRANDT and FREEMAN (2009) wrote:

[E]ndogeneity often is synonymous with political accountability. The uncertainty on which macroeconomists rely on for identification is [...] a source of democratic legitimacy. Allowing for endogeneity between popular evaluations of government, policies, and policy outcomes is essential to capture the essence of democratic politics. Structure in a B-SVAR model



amounts to the contemporaneous relationships between the variables that one expects to see.

For example, a basic solution might be a simple frequentist reduced form vector autoregression (RF-VAR) model. However, RF-VAR models do not theoretically distinguish between variables' endogeneity and exogeneity; thus, the identification of parameters for each variable is not appropriately restricted, and this specification uncertainty produces an incorrect impulse-response relationship. To address such a substantive methodological issue, this study will instead employ a B-SVAR model to comprehensively assess the "cyclical" Japanese macro polity system. However, before explaining the empirical setting, let us summarize the features of existing Japanese macro political studies.

### 2.3 THE POLITICAL CONTEXT IN POSTWAR JAPAN

Regarding studies of Japanese politics, two notable points have been raised with respect to political representation. We can classify the scholarship in this field based on how it defines the notion of democracy: procedural or substantive.

We begin by considering procedural democracy. Japanese politics experienced a sizeable change in electoral institutions when it made the switch from single non-transferable vote with multi-member districts (SNTV/MMD) to small member districts with a proportional representation (SMD with PR) system. This electoral institutional reform, as a significant natural experiment, inspired many studies examining its effects. A number of articles considering this reform tended to focus on individual political actors, such as politicians and voters; these articles generally analyzed changes in the actors' attitudes, perceptions, and, primarily, behaviors *before and after* the reform. The meaningful knowledge gleaned from this line of inquiry can be summarized as follows: with the institutional change, the Japanese legislatures (candidates) came to place more stress on policy aspects, influenced by the aim of reform, that is, to encourage a general shift from "pork" (special interest) to policy (general interest) (KRAUSS and PEKKANEN 2004; HIRANO 2006; FUJIMURA 2012; see also REED 2005; SCHEINER 2006; 2008). Following this change among politicians, the voting patterns of the Japanese electorate also changed apace, from personal voting to policy voting. Further, the legislatures' emphasis on policy promoted voter concerns in regard to policy, rather than concerns relating to pork. Importantly, however, this strain of research mainly centers on unfolding legislative behavior, not directly addressing the public-elite link. Meanwhile, the change in the

electorate has been separately examined in research conducted on voting behavior. Consequently, a gap exists in the research on this topic; although this institutional change has been assumed to have contributed to a large shift in the polity itself, analysis of this contemporaneity and cyclicity is still required to prove this.

Second, aspects of substantive democracy have tended to be somewhat denigrated in studies of Japanese politics; for example, research directly weighing policy responsiveness in Japan has largely delivered a negative assessment in this regard (KOBAYASHI 2012). Furthermore, the pork barrel politics of the SNTV/MMD era yielded scholarship emphasizing the bias in political representation (SAITŌ 2010); pork—such as subsidies for agricultural, forestry, and fishery products, and to the construction industry—has been commonly regarded as the root of biased policy responsiveness. This representation bias is supposedly entrenched as a hallmark of Japanese democracy. Founded on previous research directly analyzing Japanese political representation by considering substantive aspects, negative assessments have been dominant, and these findings inform us of the distorted and poorly functioning property of dynamic representation.

Differentiated from the above two properties, an analysis aiming to comprehensively estimate the polity that comprises the electorate, party, and government has been conducted. For example, OHMURA (2012) examined the relationship between public policy mood and government compensation using a structural vector autoregressive model and claimed that public opinion has a causal effect on compensation, a phenomenon known as “the relief mood.” However, this study is limited to the period that ended in 2005, and consequently, the decade after the 2008 financial crisis, which includes the Great East Japan earthquake, and the subsequent economic recovery, has been excluded, despite the politico-economic upheavals that occurred during this period. Nevertheless, during the era examined, characteristics of public opinion, policy moods, and their effects on government policy handling are assumed to have changed extensively. Further, the scope of OHMURA’S (2012) analysis was limited to mandate representation, that is, the causal path from public opinion to government policy making and its implementation, and it does not consider the accountability aspect, voters’ retrospections, or the reformation of public opinion as a result of former policy outcomes. Thus, taking the “cyclical” nature of the representation process into consideration, the extension of previous research using newly-constructed moods and the application of a more comprehensive approach to endogenous politico-economic systems is required.

Given the trends in the abovementioned literature and the possible improvement suggested, in the next section we turn our attention to describing the empirical setting of this article.

### 3. *Empirical Analysis*

#### 3.1 DATA AND METHOD: THE BF MODEL'S ADVANTAGE AND IMPROVEMENTS MADE

The data consists of yearly time-series components ranging from 1959 to 2015. As will be explained in more detail later, it also includes endogenously nested political, economic, and public opinion variables. Although OHMURA (2012), for example, adopted the SVAR model to examine such a problem, in the SVAR model the number of parameters is limited in order to compute all the required settings. Consequently, in this research the B-SVAR model will be applied to estimate the interrelation between each variable's impulse (shock) and response.

The B-SVAR model possesses certain merits in terms of its ability to negotiate (1) complexities in both contemporaneous and lag structures; (2) the stationary problem; and (3) specification uncertainty (BRANDT and FREEMAN 2009, 122–28; see also BRANDT and FREEMAN 2006; SIMS and ZHA 1998). Building on the advances that the B-SVAR provides, the BF model can identify the causal mechanisms between public opinion and policy outcomes. Although the BF's SVAR model deeply reflects many economic components, the key factor—the variable relating to public opinion—is limited to macropartisanship.<sup>6</sup> As in STIMSON et al. (1995) and ERIKSON et al. (2002), the most crucial variable, the electorate's expectations of overall government policy, is not embraced in the estimation. Whether policy expectations actually affect policy, policy outcomes, or accountability must be examined.

Second, the BF's model seems to compute the impact of political accountability, but it does not include variables directly representing political accountability and consequent electoral performance (see SATTTLER et al. 2008). Thus, the causal path concerning whether public opinion is reflected in party policy and government performance must be incorporated into the SVAR model; it should also reflect voters' power to sanction/

6. In the British macro polity analysis conducted by SATTTLER et al. (2008), sociotropic expectations, personal expectations, prime ministerial approval, and voting intentions were fully incorporated. The present analysis is based, to some degree, on the setting of SATTTLER et al. (2008).

reward incumbent parties. At this point, considering the above, the construction of a new macro polity SVAR model featuring Bayesian estimation will now be described.

Based on the abovementioned efficacy of the B-SVAR, the equations for the SVAR-model estimation scheme were set as follows:

$$A(L) \underbrace{y_t}_{1 \times m} = \underbrace{\omega_t}_{1 \times m} \quad (1)$$

$$\text{where, } A(L) = \underbrace{A_0}_{m \times m} - \sum_{l=1}^L \underbrace{A_l}_{m \times m} \underbrace{L_l}_{1 \times m} \quad (2)$$

$$\underbrace{\omega_t}_{1 \times m} = \underbrace{c}_{1 \times m} + \underbrace{\varepsilon_t}_{1 \times m}, \quad \varepsilon_t \sim i.i.d(0, D) \quad (3)$$

$$E[y_{t-l}\varepsilon_t] = 0 \forall l, E[\varepsilon_t\varepsilon_t] = \Omega_\varepsilon, t = 1, 2, \dots, T. \quad (4)$$

In equations (1) and (2),  $A(L)$  denotes the relationship between  $A_0$  and  $A_l$ . Here,  $A_0$  is a contemporaneous (o) coefficient matrix (e.g., public opinion, party policy, policy outcomes), and  $A_l(l = 1, \dots, L)$  refers to the  $l^{th}$  lag coefficient matrix ( $L_l$  denotes the  $l$ th lag term) (e.g., election timing, ruling parties' vote share, economic variables).  $y_t$  is  $m \times 1$  vector of observations for  $m$  variables at  $t$ , and  $\omega_t$  is composed of a vector of disturbance with a structural (external) shock  $\varepsilon_t$  and a vector of constants  $c$ , as in equation (3). At this point,  $\varepsilon_t$  can be assumed to be mutually independent, meaning the variance-covariance matrix is diagonal. The entire mathematical process of B-SVAR is based on BRANDT and FREEMAN (2006; 2009) and SIMS and ZHA (1998; 1999). Further, estimation and sampling through the posterior of the above model can be computed on the basis of a Gibbs sampler, a Markov Chain Monte Carlo algorithm (20,000 draws with 2000 burn-in). Error bands from the posterior samples are built on the likelihood-based eigenvector method, for which asymmetric likelihood and posterior density should not be assumed (SIMS and ZHA 1999, 1127–29; BRANDT and FREEMAN 2006, 17–18). Moreover, with the two-tailed criterion, credible intervals can be computed as 16 and 84 percent and 5 and 95 percent. The settings for the credible intervals are derived from SIMS and ZHA (1995, footnote 15; 1999, 1118) and BRANDT and FREEMAN (2006, 28; 2009), based on the theory that the 68 percent criterion is much more indicative of the relevant range of uncertainty than 90 percent, which is indicative of pretesting and data mining.

### 3.2 MEASURING PUBLIC OPINION:

#### TWO PUBLIC MOODS IN POSTWAR JAPAN

In order to operationalize public opinion, this article employs the concept of public policy mood (STIMSON 1999; STIMSON et al. 1995). When evaluating the effect of public opinion, the desirable method is to assess the aggregated electorate's policy preferences toward a government's policy making and policy implementation. In Japan, the "Public Survey Concerning Living for Citizens [PSLC; Kokumin Seikatsu ni kan suru Seron Chōsa]," conducted by the Cabinet Office, acts as a useful resource.<sup>7</sup> The survey includes questions such as "which policy area would you like the government to emphasize?" and respondents choose one of the multiple choices provided.<sup>8</sup> However, as with the General Social Survey in the U.S., missing values and measurement problems create difficulties. To address this, we employed STIMSON's (1999) recursive dyadic algorithm to compute policy moods. Although Stimson's algorithm basically relies on the principal component analysis, it allows us to impute missing values using a forward/backward recursive method, which utilizes latent values that are calculated by considering the ratios between comparable variables across variables and times.<sup>9</sup> The results are reported in TABLE 1 and FIGURE 2.

7. PSLC data consist of observations from 1960 to 2017; however, since data for other political variables (e.g., party policy) after 2015 are unavailable, the analysis of this article does not go beyond this date. Nevertheless, for the policy mood variable, this study relies on PSLC data to compute the public mood from 1960 to 2017.

8. The number and types of choices in a given survey can occasionally differ. In the 1959–1968 period, respondents could choose only one item from among the multiple choices given. The proportion of the selections for each item directly corresponds to the likelihood of its selection, so this study adopts each reported proportion as the value for the respective policy area. During the 1969–1978 and 1981–1982 periods, the questions were formulated as "what is most important for you?" and "what is the next most important for you?" Consequently, in these cases, this study only uses the answers to the first question, "what is most important for you?" Further, in later surveys, multiple answers were permitted. Thus, in the 1983–1991 period, respondents could select two choices; in the 1979–1980 period, three; and in the 1992–1997 period, as many as the respondents' desired. For these years, we chose to add up all the reported proportions for every item and set this total value as a denominator; the value of a certain policy was computed as the individual proportion divided by the denominator.

9. The algorithm, which can be run in R, is published on James A. Stimson's website (<http://stimson.web.unc.edu/files/2015/07/ExtractDoc.pdf>). Other methods of determining public moods have been tested by applying social (ENNS and KELLSTEDT 2008), political (ERIKSON et al. 2002), and economic perspectives (DURR 1993; STEVENSON 2001; ERIKSON

VARIABLES	N	CORRELATION	
		1ST DIMENSION: GROWTH	2ND DIMENSION: RELIEF
tax cuts	58	<i>.884</i>	<i>.230</i>
social welfare	58	<i>.476</i>	<i>-.510</i>
agriculture	54	<i>.897</i>	<i>.746</i>
unemployment	47	<i>.050</i>	<i>.913</i>
education	57	<i>.636</i>	<i>.150</i>
price	53	<i>.715</i>	<i>-.450</i>
housing problems	57	<i>.796</i>	<i>-.701</i>
small and mid-size firms	54	<i>.813</i>	<i>.840</i>
defense	26	<i>-.611</i>	<i>.150</i>
diplomacy	38	<i>-.627</i>	<i>.900</i>
consumer protection	30	<i>.572</i>	<i>.073</i>
energy issues	32	<i>-.177</i>	<i>.496</i>
business cycle	39	<i>-.277</i>	<i>-.122</i>
fiscal reform	19	<i>.876</i>	<i>.080</i>
regional activation	30	<i>.199</i>	<i>.093</i>
elderly	29	<i>.133</i>	<i>.766</i>
birth rate	10	<i>.164</i>	<i>-.261</i>
disasters	19	<i>-.518</i>	<i>-.321</i>
crime	46	<i>-.374</i>	<i>-.960</i>
culture	10	<i>.897</i>	<i>-.586</i>
science	10	<i>.708</i>	<i>-.674</i>
Eigen value	-	5.23	2.3
% explained variance	-	40.09	17.61

TABLE 1. Public moods in postwar Japan.

Note: Italicized values have significant correlation. The algorithm is based on STIMSON (1999, Appendix). The above was computed using the “extract” function of R, publicized on James A. Stimson’s homepage.

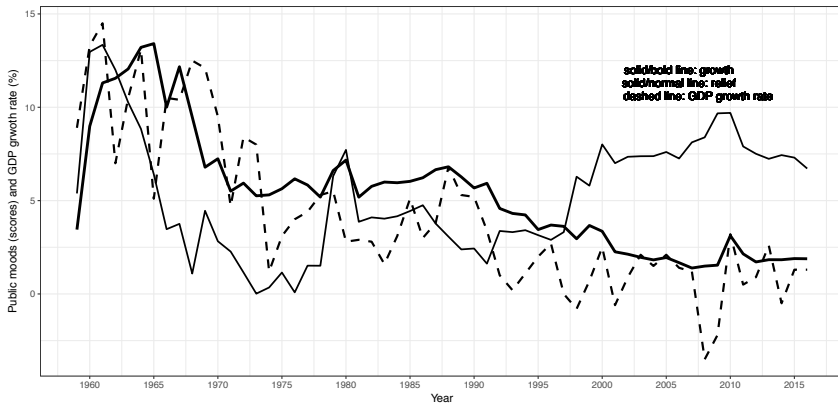


FIGURE 2. Public moods in postwar Japan.

Considering the visualized time-series transition shown in FIGURE 2, it can be inferred that a dramatic change occurred around the mid-1970s, immediately after the first oil shock. The next shift in mood can be observed after the 1990s, the so-called “lost decade,” and corresponds to the post-bubble era.

The first dimension can be defined as *a mood corresponding to the enjoyment of economic growth* (hereinafter, the growth mood), and the second as *a mood that relieves weaknesses* (the relief mood) (cf. OHMURA 2012). The first dimension, the growth mood, has significant positive correlations with agriculture, culture promotion, tax reduction, fiscal reform, measures for small- and medium-sized enterprises, housing problems, price policies, and science promotion. Other notable elements are economic-related components that the Japanese government has emphasized to promote economic growth. Among voters, those from the middle class are seen as focusing on fields in which the national economy is well-handled. To help us understand the characteristics of moods, the GDP growth rate is also presented in FIGURE 2.<sup>10</sup> It shows that the growth mood moves in parallel with the GDP growth rate—the greater the economic growth, the higher

et al. 2002, 230–35). The present study mainly analyzes economic-policy-outcome shocks in response to such moods; thus, it relies on the economic perspective to a greater degree.

10. GDP growth rate is sourced from “3–4 Gross Domestic Product and Factor Income Classified (At Current Prices, At Constant Prices, Deflators, Benchmark year: 1990),” published by The Public Management Ministry’s Statistics Bureau (<http://www.stat.go.jp/data/chouki/zuhyou/o3-o4.xls>).

the growth mood (and vice versa). It can be seen that the most remarkable period was after the first oil shock, when the growth mood fell sharply; then, during the 1980s, the so-called “period of stable growth,” the mood generally remained at a higher level. However, after 1990, in the aftermath of the collapse of the bubble economy, the growth mood fell to its lowest level, and throughout the “lost decade,” it did not return to its highest level.

In contrast, the other mood, the relief mood, has higher positive correlations with unemployment, diplomacy, measures for small and medium-sized companies, aging societies, and agriculture, and higher negative correlations with efforts to combat crime and housing problems. While it is difficult to interpret the result of the positive correlation with diplomacy and negative correlation with crime, the second dimension is likely to relate to concerns from the socially vulnerable.

The transitions in the relief mood, which are inverse to those of the growth mood, also help to provide an understanding of its property. The relief mood clearly hit a peak during the first oil shock, and fell to its lowest point in the mid-1980s, during the period of stable growth. In addition, following the “bubble era,” it began rising again and maintained this high level until 2005. The relief mood has an obvious characteristic of rising after a period of economic crisis; for example, the oil shock, the bursting of the bubble economy, the Asian financial crisis, and the 2008 financial crisis promoted more government intervention and expenditure. In this way, the growth and relief moods move in almost diametrically opposite directions, especially after the 1990s.

What sort of policy outcomes can we expect when a government or individual party reflects the dominant public mood? Regarding the growth mood, as it represents general satisfaction with the status quo, when it reaches sufficiently high levels, it is assumed that governments maintain their current level and type of expenditure, such as conducting redistribution and providing compensation or subsidies to boost the economy. In contrast, the relief mood is predicted to promote more government intervention and expenditure, because it essentially communicates the perceived need for more government measures to instigate change.

### 3.3 MEASURING POLICY, POLICY OUTCOME, AND ACCOUNTABILITY

As recognized in the existing literature, the crafting of party policy and government policy outcomes must be distinguished from each other (MANIN et al. 1999; POWELL 2000; JONES 2012). For example, Jones attempted to examine whether “legislators are held accountable for the policy positions they take” and whether “they are held accountable for the policy outcomes



they preside over” (JONES 2012, 764). Thus, from the macro perspective, both the impulse (shock) and response of party policy posture and policy outcomes ought to be separately examined. Hence, it bears explaining how this article will operationalize party policy, policy outcomes, and further selection/sanction aspects.

### 3.3.1. PARTY POLICY

Most political parties in Japan publicize campaign promises before every Lower House election, and long-term data on party manifestos have been collected by the Manifesto Project (MP) for every election since 1960. Although other datasets of the campaign promises of individual legislatures exist, these are limited to several waves. To ensure we have a suitable number of observations, and to allow for replication, here we will employ, from the MP, a variable measuring the emphasis on economic policy, particularly economic goals and boosting the economy. In this approach, the economic-goal-related variable is constituted of three components: economic goals (per408), Keynesian economic demands (per409), and economic growth (per410).<sup>11</sup> Two theoretical predictions can be made at this point: (1) it can be supposed that, if the rise in growth mood continues, the ruling parties will commit more strongly to achieving economic goals; and (2) it can also be predicted that an increase in the relief mood will further motivate the government to pursue economic expansion. According to these theoretical predictions, an increase in growth mood can be expected to foster a positive response in terms of economic goal commitment, while the opposite can be expected if the relief mood thrives.

### 3.3.2. POLICY OUTCOME:

#### GOVERNMENT COMPENSATION AND SOCIAL WELFARE

The variable(s) describing policy outcomes ought to measure elements that are likely to fluctuate when the electorate’s policy preference set is reflected in actual policy. Considering the Japanese context, as in ESTEVEZ-ABE (2008) and KITAYAMA (2003), Diet members have consistently endeavored to distribute resources through public works as an alternative to providing social welfare. This form of compensation is defined as the operationalization of the government’s policy implementation (SAITŌ 2010; CALDER 1988; see also HORIUCHI and SAITŌ 2003). Compensation is calculated as the sum of government investment in public works

11. In order to fulfill all observations (impute missing observations), I used the R-package, “imputeTS,” which adopts the linear interpolation algorithm.

projects and the government's inventory investment (e.g., procurement of rice from farmers). This sum is adjusted to accommodate the inflation rate and seasonal fluctuations.<sup>12</sup>

In addition to the compensation aspect, this article also attempts to estimate the impulse and response of social welfare, that is, redistribution.<sup>13</sup> Although compensation functions as an alternative proxy for social welfare expenditure, it accounts for 25–40 percent of total government consumption. Additionally, social expenditure is directly returned to citizens through public assistance, social insurance, and social assistance. Referring to this aspect, it is also worthwhile to confirm a link between welfare expenditure and electoral results.

If successive Japanese governments have satisfied policy moods that are reflective of public expectations, rises in the relief mood trend should generate a positive response in regard to compensation. In contrast, for the growth mood, which is characterized by satisfaction with the status quo, even compensation may not help it to reach certain credible levels. On the other hand, a government may regard a period dominated by a higher growth mood as a good opportunity for implementing fiscal discipline; in this case, a growth mood shock would induce a negative response from compensation.

### 3.3.3. MEASURING POLITICAL ACCOUNTABILITY

When voters are satisfied with an incumbent, they should, logically, reselect them. In contrast, a voter should punish an incumbent if it noticeably breaks electoral promises (FEARON 1999). To examine this simple theoretical argument, we can introduce a hypothesis for macro-level analysis: an incumbent party gains more votes when the electoral judges show that political accountability has been met, that is, the rise in compensation or social welfare expenditures.

Concretely speaking, the incumbent party/parties' seat share can be used as the quantitative substitute for political accountability. In analyses of

12. The variable "compensation" is based on the sum of "capital formation by the public sector" and "increase in stocks by public enterprise," stemming from the data in "3-1 Gross Domestic Expenditure (at current prices, the benchmark year is 1990)" published by The Public Management Ministry's Statistics Bureau (<http://www.stat.go.jp/data/chouki/zuhyou/03-01.xls>). To determine the total value of compensation, the following equation is used: *(Capital Formation + Increase In Stock)*

$$GDP$$

13. Social expenditure data is derived from the social welfare expenditure statistics published by the National Institute of Population and Social Security Research ([http://www.ipss.go.jp/site-ad/index\\_Japanese/security.html](http://www.ipss.go.jp/site-ad/index_Japanese/security.html)).

the Liberal Democratic Party's (LDP) thirty-eight years of dominance from 1955 to 1993, known as the "1955 political system," the LDP's vote share for each observed year has been directly adopted as a proxy for accountability for these years. For the 1993 election, when a power shift occurred, a mean value of the vote shares of the coalition parties—The Japan New Party [Nihon Shinto], New Party Sakigake (Pioneers) [Shinto Sakigake], Shinseito, Socialist Party [Shakaito], Komeito, Democratic Socialist Party [Minshato], The United Social Democratic Party [Shakai Minshu Rengo], and Democratic Reform Parties [Minshu Kaikaku Rengo]—is employed as the relevant value. When these predictions are met, the impulse of compensation or social welfare expenditure leads to a positive response in the share of seats for the ruling parties. The theoretical predictions so far are organized in TABLE 2.

### 3.4 OTHER ELEMENTS

Political and economic conditions can also be embraced as variables in the B-SVAR setup. First, election timing is assumed to influence government policy outcomes, such as monetary operations and a relaxed fiscal policy. Thus, the dummy variables of the Upper and Lower House election years are also considered. Next, in regard to economic conditions,<sup>14</sup> the unemployment rate<sup>15</sup> and GDP growth rate are estimated in order to measure their impact on all public opinion and economic/political outcomes.

Descriptive statistics and estimation settings containing equations and identification restrictions, as well as judgments on the best fitting model, are provided in the online appendix.<sup>16</sup>

14. CPI is sourced from "CPI: general, excluding imputed house rent, 22–13 Consumer Price Index (All Japan and Subgroups)," which is published by The Public Management Ministry's Statistics Bureau (<http://www.stat.go.jp/data/chouki/zuhyou/22-13.xls>).

15. The unemployment rate is sourced from "Unemployment rate, 19–4 Population 15 Years Old and Over by Labour Force Status and Sex—Labour Force Survey (1948–2010)," which was published by The Public Management Ministry's Statistics Bureau (<http://www.stat.go.jp/data/chouki/zuhyou/19-04.xls>).

16. Please refer to the author's homepage. [https://3a1da382-a-62cb3a1a-s-sites.google.com/site/hanakohmura87/JMP\\_onlineappendix20170620.pdf?attachauth=ANoY7cqeqemApFBhw\\_R-c671ag3CwrkDbeKAA2HOSY7L9MEey3bo8fEoTfqmSlXcfcO7T\\_oO26M3lOQtcmGBZCtvaDHbWuw\\_FZNFkvY\\_mNxZzhjA5ozvuViEV-QdL\\_g52avdknjZuQbZxiYXlpBc\\_IYQhPfy6YQnRQCMNtQJxkHgbLR2InF6\\_GN911Su6XU-hlb8GMn9ddD\)hfQ6BslRces4LURxENG93zc\\_-s-dgflQaRG9k49np8%3D&attredirects=0](https://3a1da382-a-62cb3a1a-s-sites.google.com/site/hanakohmura87/JMP_onlineappendix20170620.pdf?attachauth=ANoY7cqeqemApFBhw_R-c671ag3CwrkDbeKAA2HOSY7L9MEey3bo8fEoTfqmSlXcfcO7T_oO26M3lOQtcmGBZCtvaDHbWuw_FZNFkvY_mNxZzhjA5ozvuViEV-QdL_g52avdknjZuQbZxiYXlpBc_IYQhPfy6YQnRQCMNtQJxkHgbLR2InF6_GN911Su6XU-hlb8GMn9ddD)hfQ6BslRces4LURxENG93zc_-s-dgflQaRG9k49np8%3D&attredirects=0).

## 4. Results

### 4.1 RESULTS OF MANDATE REPRESENTATION

FIGURES 3 (growth mood-compensation), 4 (growth mood-welfare), 5 (relief mood-compensation), and 6 (relief mood-welfare) show the posterior impulse-response function (IRF) graphs simulated by Monte Carlo integration after running the B-SVAR estimation.<sup>17</sup> In FIGURES 3 through 6, the center line indicates the median responses calculated from the B-SVAR posterior. Meanwhile, each upper/lower line refers to the credible intervals, with tight error bands of 10 and 90 percent (inner solid lines) and loose error bands of 16 and 84 percent (outer lines), in accordance with the settings used by BRANDT and FREEMAN (2009). As previously mentioned, these settings for credible intervals are derived from SIMS and ZHA (1999) and BRANDT and FREEMAN (2006; 2009).<sup>18</sup> Further, the X-axis refers to the duration of each median impulse, and the unit used is a year. For convenience, all of these results, corresponding to the theoretical predictions in TABLE 2, are listed in TABLE 3.

*Mandate representation* [impulse(column)→response(row): GrM,ReM→Cm]

To begin, the results relating to mandate representation in Japan will be discussed. The corresponding shocks, which should be checked, are the growth mood (**GrM**) and the relief mood (**ReM**), represented by the first column's shock of **GrM/ReM** to the second row of a response to party policy, **Epol**, and the third row of a response to policy outcome, **Cm**, in FIGURES 3 and 5. First, to evaluate the founding mechanism of mandate representation, *how public moods shift party policy and government policy outputs*, the growth mood's influence on party policy/manifests (**Mn**) yields the result that the growth mood's shock positively enters the party policy's equation; thus, it is indicated that ruling parties commit less to economic measures, including endeavors to meet economic goals and Keynesian demands. After the rise of the growth mood, the IRF shows that ruling parties continue to decrease their commitments to economic expansion. This tendency is reflected in the downsizing of compensation, that is, the share of public construction per GDP.

17. To perform estimates using the B-SVAR model, the "szbsvar" command was used; to compute the Ao posterior parameter matrix, the "Ao.posterior" command was used; and for the error bands of the impulse-response function, the "mc.irf" command was used.

18. Using the command "plot.mc.irf," the argument "method=c("Sims-Zhaz")" was employed for the likelihood-based eigenvector method.

COMPENSATION					
<u>MANDATE REPRESENTATION</u>		<u>ACCOUNTABILITY REPRESENTATION</u>	<u>SELECTION/SANCTION</u>		<u>FEEDBACK</u>
Policy	Compensation		Policy	Compensation	
GrM/ReM → Epol	GrM/ReM → Cm	Epol → Cm	Epol → Rl	Cm → Rl	Cm → GrM/ReM
GrM	(-)	(-)	(+)	(+)	(+)
ReM	(+)	(+)	(+)	(+)	(-)
SOCIAL WELFARE					
<u>MANDATE REPRESENTATION</u>		<u>ACCOUNTABILITY REPRESENTATION</u>	<u>SELECTION/SANCTION</u>		<u>FEEDBACK</u>
Policy	Welfare		Policy	Welfare	
GrM/ReM → Wpol	GrM/ReM → SW	Wpol → SW	Wpol → Rl	SW → Rl	SW → GrM/ReM
(-)	(-)	(+)	(+)	(+)	(+)
(+)	(+)	(+)	(+)-	(+)	(-)

TABLE 2. The theoretical predictions of B-SVAR estimations.

COMPENSATION					
<u>MANDATE REPRESENTATION</u>		<u>ACCOUNTABILITY REPRESENTATION</u>	<u>SELECTION/SANCTION</u>		<u>FEEDBACK</u>
Policy	Compensation		Policy	Compensation	
GrM	√	√	-	-	√
ReM	-	√	√	-	√
SOCIAL WELFARE					
<u>MANDATE REPRESENTATION</u>		<u>ACCOUNTABILITY REPRESENTATION</u>	<u>SELECTION/SANCTION</u>		<u>FEEDBACK</u>
Policy	Welfare		Policy	Welfare	
-	-	-	-	-	-
-	-	-	-	-	-

TABLE 3. B-SVAR Results: Mandate, accountability, selection/sanction, and feedback in postwar Japan.

Note: “√” (empty) means that the significant impulse-response is confirmed (is not confirmed).

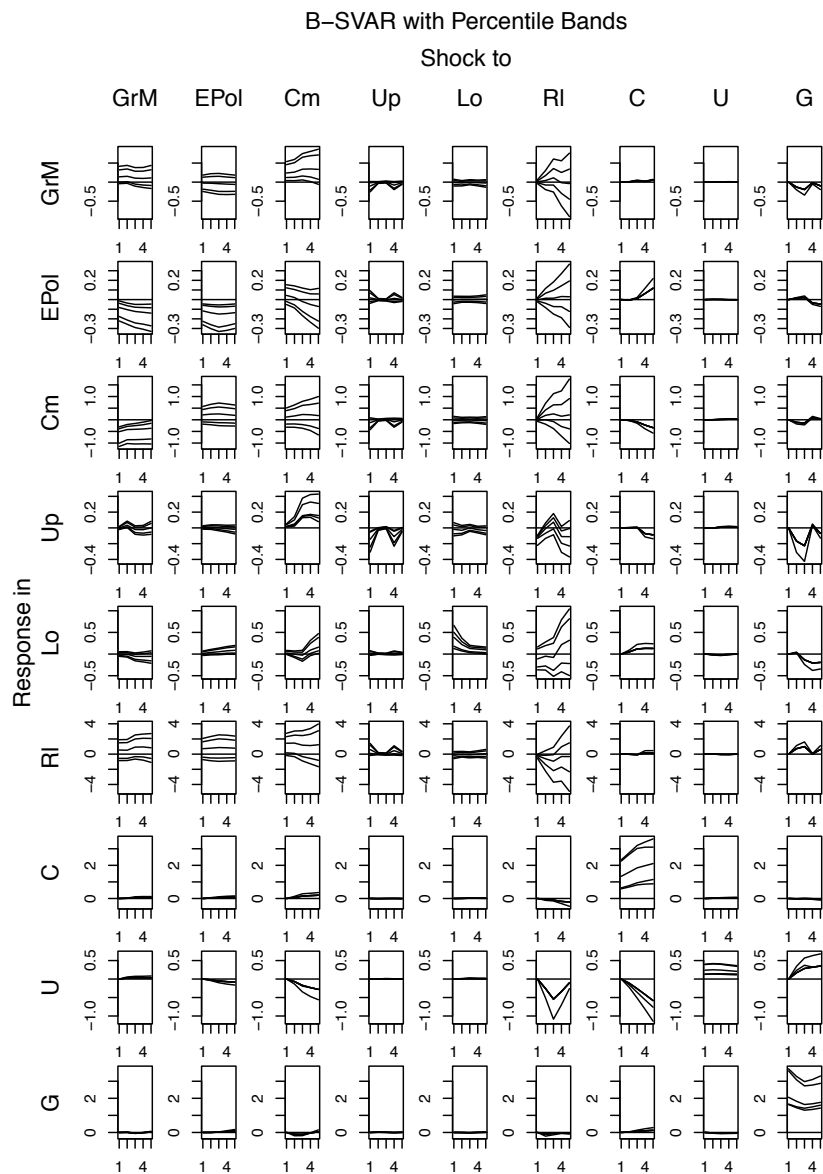


FIGURE 3. The posterior impulse-response, determined using B-SVAR estimation: the pattern of growthmood compensation.

Note: The tight upper and lower lines refer to 10 percent posterior confidence intervals, and the loose lines refer to 68 percent posterior credible intervals. These error bands were computed using the likelihood-based eigenvector method of Sims and ZHA (1999).

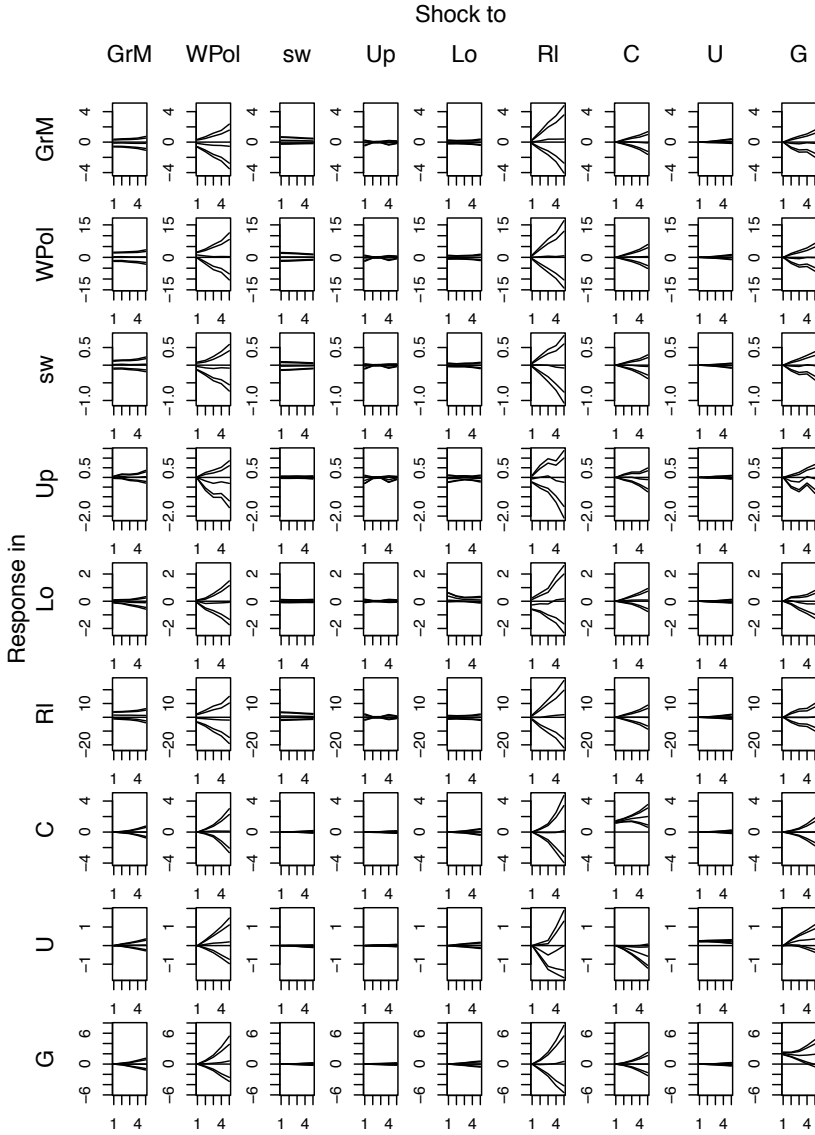


FIGURE 4. The posterior impulse-response, determined using B-SVAR estimation: the pattern of growth mood social welfare expenditure per GDP.

Note: The outer upper and lower lines refer to tight 10 percent posterior confidence intervals, and the loose lines refer to loose 68 percent posterior credible intervals. These error bands were computed using the likelihood-based eigenvector method of Sims and ZHA (1999).

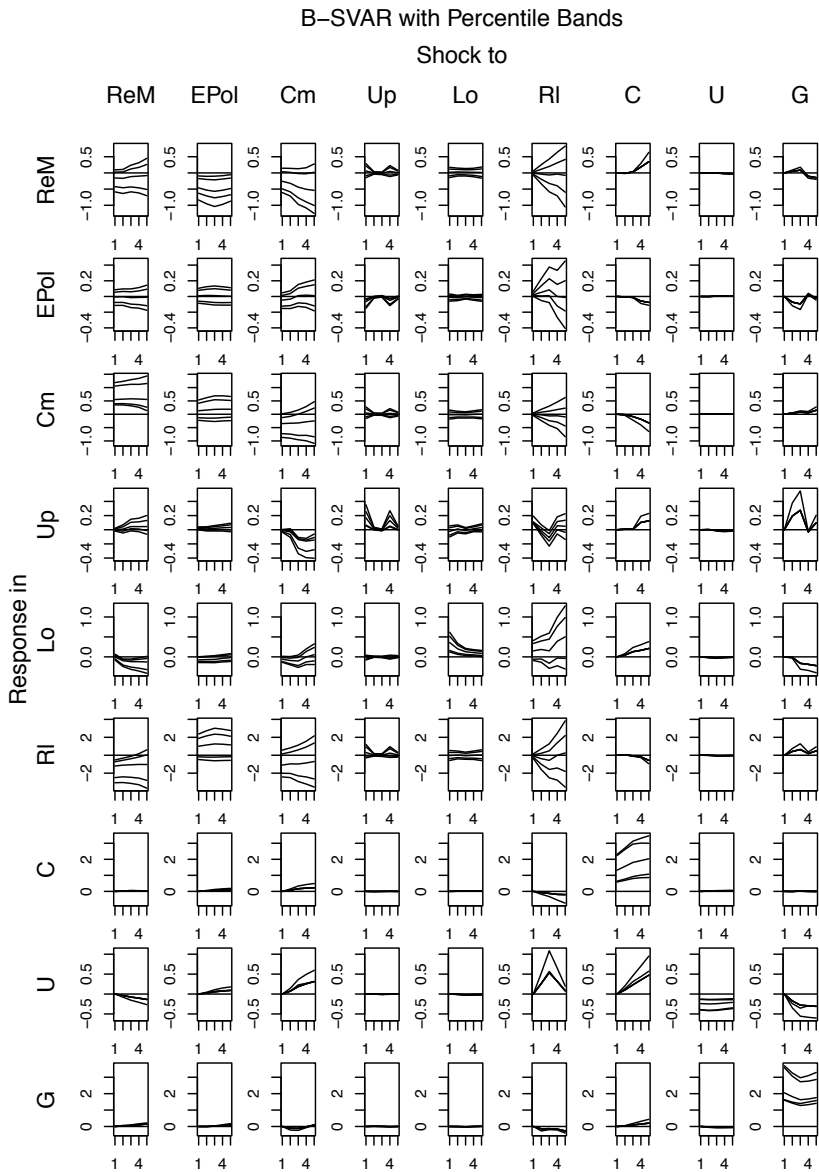


FIGURE 5. The posterior impulse-response, determined using B-SVAR estimation: the pattern of relief-mood compensation.

Note: The outer upper and lower lines refer to tight 10 percent posterior confidence intervals, and the loose lines refer to loose 68 percent posterior credible intervals. These error bands were computed using the likelihood-based eigenvector method of Sims and ZHA (1999).



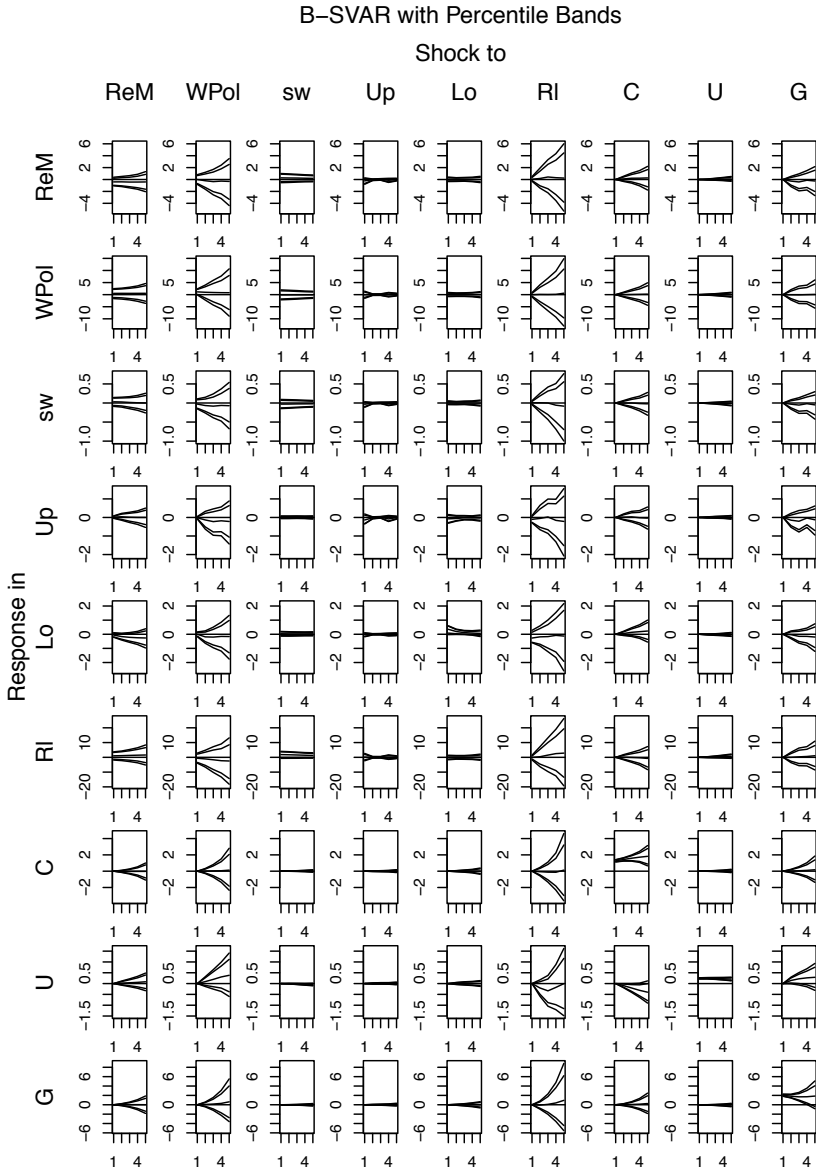


FIGURE 6. The posterior impulse-response, determined using B-SVAR estimation: the pattern of relief-mood social welfare expenditure per GDP.

Note: The outer upper and lower lines refer to tight 10 percent posterior confidence intervals, and the loose lines refer to loose 68 percent posterior credible intervals. These error bands were computed using the likelihood-based eigenvector method of Sims and Zha (1999).

The contemporaneous effect of the relief mood shows a slightly negative direction, implying that even if the electorate requests relief, the ruling party's emphasis on economic policy will not necessarily increase. However, the result still indicates that an upward response to compensation occurs as the relief mood heightens.

These results, importantly, differ from those of previous research that argued the poor existence of mandate representation in Japan. In contrast to the pessimistic views of SAITŌ (2010) in this regard, this study seems to confirm mandate representation with respect to the **GrM** and **ReM** cases. While OHMURA's (2012) SVAR analysis showed that the relief mood's impulse generates an increase in government compensation, the result here further implies that, as part of the shift, the government decides to respond not only to the relief mood assumed to be fostered among the socially vulnerable, but also to the middle class through the reduction of expenditure during periods when the economy is doing well.

#### [GrM,ReM→SW]

Regarding the result relating to the proportion of social expenditure to GDP (**SW**), both in the growth and relief mood models (see FIGURES 4 and 6), almost identical tendencies can be found: both the posterior tight and loose credible intervals cross the zero line; thus, it appears that public mood impulses do not evoke a welfare expenditure response. This result contradicts that of previous research, in which the relief mood was found to increase the share of social expenditure per government expenditure (OHMURA 2012). Compared to the estimation of compensation, in the field of social welfare, mandate representation seems not to be validated with respect to both growth and relief moods.

### 4.2 RESULTS OF ACCOUNTABILITY REPRESENTATION AND SELECTION/SANCTION

#### 4.2.1. ACCOUNTABILITY REPRESENTATION [Mn→Cm,SW]

Whether accountability representation is met can be evaluated by considering the intersection point of the column **Mn** and the row **Cm** in the graphs shown in FIGURES 3 and 5. These graphs show how government compensation (policy outcome) corresponds to the commitments stipulated in the ruling party's policy promises.<sup>19</sup>

19. We have a limitation here in regard to the fit between a party's emphasis on economic expansion and the amount of compensation provided; we can only acknowledge the quantity of the ruling parties' economic emphasis, not their quality.

In the case of both the growth and relief mood, a party policy shock does not enter the expenditure-related equations **Cm** and **SW** positively or negatively. Focusing on the loose credible intervals in four types of estimations, any impulse in economic expansion/welfare policy commitments does not generate a predictable and sizable increase in compensation/welfare expenditure. Although accountability representation is rarely tested in these studies, it cannot even be detected in this result, which defines accountability representation as the congruence between policy commitments and implementations.

*Selection/sanction* [**Cm**,**SW**→**RI**]

The next noteworthy finding concerns the selection/sanction process, in which policy outcomes influence the ruling parties' electoral outcomes. Policy outcome shocks (**Cm** and **SW**) do not affect (**RI**), as shown by the intersection points of the third column and sixth row in each figure. Only in the case of the presence of a growth mood and a compensation pattern, which is shown in FIGURE 3, is compensation likely to enhance the ruling seat share by 2 percent in the next period.

To summarize the above points, although it is difficult to differentiate between the electorate's choices to reselect or to sanction an incumbent, we can at least conclude that the selection process of the Japanese polity can be partially observed. That is, when LDP-centered governments emphasize economic expansion, especially relating to public construction, and achieve a certain level of business performance, they can expect a better electoral performance immediately after the implementation of these distribution policies, but not over any longer period. This result indicates that the Japanese electorate is prone to react to an increase in private goods, that is, special interests. However, it is important to note that with respect to accountability in the social welfare sphere, redistribution is unlikely to enhance a ruling parties' vote share.

#### 4.3 RESULTS OF FEEDBACK

*Compensation* [**Cm**→ **GrM**,**ReM**]

The political representation process in Japan assumes a recursive aspect, wherein political outcomes reshape public expectations toward policies. Hence, this feedback process can be understood by considering the intersections between the policy outcome (**Cm**) shocks of the two types of public moods, in which a policy and its outcome affect moods.

Considering the intersection of **Cm** and **GrM** in FIGURE 3, the (**Cm**) shock positively enters the growth mood equation, but negatively enters

that of the relief mood (**ReM**) in FIGURE 5, with almost 68 percent credible intervals (loose criteria). According to these results, compensation can accelerate the middle-class public's approval of the general state of the economy, while enabling the government to somewhat "cure" those who are weak at saving. Hence, public mood functions as a governments' economic measures, and so concurrently shows aspects of the outcomes of these measures. In terms of compensation, that is, policies for economic booms, a cyclical relationship between public opinion and policy outcome is likely to be found.

In contrast to the result for compensation, a shock in social welfare expenditure does not generate a sizable change in public moods; specifically, the implementation of a redistribution policy for the socially vulnerable does not evoke a rise in the growth mood and a decrease in the relief mood.

## 5. Conclusion

This analysis of the Japanese macro polity has attempted to fully capture the mandate and accountability representation processes. The B-SVAR model assists in developing this approach, given the inclusive, recursive, and endogenous political-economic and citizen-party-government linkages that are present. By adding certain new types of political variables—such as public moods, the vote share of the ruling party, and election timing, all of which were not incorporated in the previous American macro polity analysis by Brandt and Freeman—this analysis can yield findings uniquely inherent to Japanese politics.

In the Japanese macro polity, the most noteworthy and contrast-laden finding is the apparent existence of mandate representation—growth mood shocks curb compensation, and relief mood shocks prompt increases in compensation. However, regarding the accountability aspect, the result does not endorse the theory that the more the ruling party—the LDP—advocates the buoyancy of the economy, the more the LDP government spends on both compensation and social welfare. Furthermore, as in both the model of compensation and social welfare, selection/sanction is partially identified as the sole case of the growth mood compensation model, while the feedback mechanism from policy implementation to public mood reformation was found to indeed function. If the LDP succeeds in supplying sufficient economic resources to the public, this may produce better electoral consequences. More concretely, however, compensation

has been revealed to promote a rise in growth mood and to cure the relief mood.

These results indicate that substantive democracy somehow functions in Japan, mainly through the policy responsiveness of the ruling party and government and the reasonable responses of the Japanese electorate toward the government's measures, which relates to the mandate aspect of representation. Further, the Japanese macro polity, as analyzed using the B-SVAR model, seems to offer a contrast to the American macro polity analyzed and conducted with the same method, because macro political-economic dynamics in Japan are revealed to be limited.<sup>20</sup> Furthermore, by comparing the American and Japanese models, this research can show the difference in the quality and importance of public opinion. In Japan, public opinion is likely to affect the direction of policy; however, it does not influence the ruling parties' adherence to policy commitments.<sup>21</sup>

However, in relation to the area of social welfare, the link between public moods, party policy, and policy outcome was not confirmed.<sup>22</sup> In conformance with previous research that advocated the substitution of social welfare with public works projects (ESTEVEZ-ABE 2008; KITAYAMA 2003), a more effectual means of cultivating better public moods and government approval might be expenditure on public works, not welfare. In this sense, although mandate representation functions in Japan, it is somehow restricted to particular industries, such as construction and agriculture, as argued by SAITÔ (2010). Although mandate representation seems to be addressed to some extent, it is likely that bias and inequality still exist; consequently, further research should give more in-depth analysis in an attempt to find a means of alleviating this.

In addition to these findings, research on Japanese macro polity ought to be improved in the following two respects. The most important is to unify the empirical connections under a single theory. As BRANDT and FREEMAN (2009) argue, the DS(G)E model, wherein the micro foundation of public opinion (macropartisanship, public moods) is developed, should

20. Since the model specifications are different, we should be cautious in directly comparing the BF model results with the B-SVAR results in the case of Japan.

21. We must make a careful note that whereas the American macro polity model shows a stationary (stable) trend of macropartisanship, continual fluctuation is implied in the model-specification comparison, caused as a result of the non-stationary model's validity.

22. Nonetheless, the analysis here has limitations in regards to addressing the natural increase in social welfare expenditure. The examination of a non-stationary problem through a time-series analysis may lead to a less credible estimation result, even when the initial value of the hyperparameter is set to that of the stationary assumption.

be applied in an effort to better connect the empirical results. Second, this research merely focuses on two aspects of policy outputs. Compensation and welfare expenditures are indeed important to operationalize and measure the government's responses; however, such fiscal policy is not all-inclusive. Like the BF model, monetary policy (e.g., controlling the money supply, interest rate, and open market operation) must be incorporated in any future modeling of the Japanese macro polity.

## REFERENCES

ADAMS, James

- 2012 "Causes and Electoral Consequences of Party Policy Shifts in Multi-party Elections: Theoretical Results and Empirical Evidence." *Annual Review of Political Science* 15: 401–19.

ADAMS, James, and Lawrence EZROW

- 2009 "Who Do European Parties Represent? How Western European Parties Represent the Policy Preferences of Opinion Leaders." *Journal of Politics* 71 (1): 206–23.

ADAMS, James, Michael CLARK, Lawrence EZROW, and Garrett GLASGOW

- 2004 "Understanding Change and Stability in Party Ideologies: Do Parties Respond to Public Opinion or to Past Elections Results?" *British Journal of Political Science* 34 (4): 589–610.
- 2006 "Are Niche Parties Fundamentally Different from Mainstream Parties? The Causes and the Electoral Consequences of Western European Parties' Policy Shifts, 1976–1998." *American Journal of Political Science* 50 (3): 513–29.

ANDERSON, Christopher J.

- 2007 "The End of Economic Voting? Contingency Dilemmas and the Limits of Democratic Accountability." *Annual Review of Political Science* 10 (1): 271–96.

ASHWORTH, Scott

- 2005 "Reputational Dynamics and Political Careers." *Journal of Law, Economics, and Organization* 21 (2): 441–66.
- 2012 "Electoral Accountability: Recent Theoretical and Empirical Work." *Annual Review of Political Science* 15: 183–201.

BRANDT, Patrick T., and John R. FREEMAN

- 2006 "Advances in Bayesian Time Series Modeling and the Study of Politics: Theory Testing, Forecasting, and Policy Analysis." *Political Analysis* 14 (1): 1–36.
- 2009 "Modeling Macro-Political Dynamics." *Political Analysis* 17 (2): 113–42.

- CALDER, Kent E.  
1988 *Crisis and Compensation: Public Policy and Political Stability in Japan, 1949–1986*. Princeton: Princeton University Press.
- CLARK, William R., Matt GOLDER, and Sona N. GOLDER  
2008 *Principles of Comparative Politics*. 1st ed. Washington DC: CQ Press.
- DURR, Robert H.  
1993 “What Moves Policy Sentiment?” *American Political Science Review* 87 (1): 158–70.
- ENNS, Peter K., and Paul M. KELLSTEDT  
2008 “Policy Mood and Political Sophistication: Why Everybody Moves Mood.” *British Journal of Political Science* 38 (3) (July): 433–54.
- ERIKSON, Robert S., Michael B. MACKUEN, and James A. STIMSON  
2002 *The Macro Polity*. Cambridge: Cambridge University Press.
- ESTEVEZ-ABE, Margarita  
2008 *Welfare and Capitalism in Postwar Japan: Party, Bureaucracy, and Business*. Cambridge: Cambridge University Press.
- EZROW, Lawrence  
2007 “The Variance Matters: How Party Systems Represent the Preferences of Voters.” *Journal of Politics* 69 (1): 182–92.  
2010 *Linking Citizens and Parties: How Electoral Systems Matter for Political Representation*. Oxford: Oxford University Press.
- FEARON, James D.  
1999 “Electoral Accountability and the Control of Politicians: Selecting Good Types versus Sanctioning Poor Performance.” In *Democracy, Accountability, and Representation*, Adam Przeworski, Susan C. Stokes, and Bernard Manin, eds., 55–97. Cambridge: Cambridge University Press.
- FEREJOHN, John  
1986 “Incumbent Performance and Electoral Control.” *Public Choice* 50 (1–3): 5–25.
- FEREJOHN, John J., and Frances M. ROSENBLUTH  
2010 “Electoral Representation and the Aristocratic Thesis.” In *Political Representation*, Ian Shapiro, Susan C. Stokes, Elisabeth Jean Wood, and Alexander S. Kirshner, eds., 271–303. Cambridge: Cambridge University Press.
- FERRAZ, Claudio, and Frederico FINAN  
2008 “Exposing Corrupt Politicians: The Effects of Brazil’s Publicly Released Audits on Electoral Outcomes.” *Quarterly Journal of Economics* 123 (2): 703–45.
- FUJIMURA, Naofumi  
2012 “Electoral Incentives, Party Discipline, and Legislative Organization:

Manipulating Legislative Committees to Win Elections and Maintain Party Unity." *European Political Science Review* 4 (2): 147–75.

GILENS, Martin

- 2005 "Inequality and Democratic Responsiveness." *Public Opinion Quarterly* 69 (1): 778–96.

HEALY, Andrew, and Neil MALHOTRA

- 2013 "Retrospective Voting Reconsidered." *Annual Review of Political Science* 16 (1): 285–306.

HIRANO, Shigeo

- 2006 "Electoral Institutions, Hometowns, and Favored Minorities: Evidence from Japanese Electoral Reforms." *World Politics* 59 (1): 51–82.

HORIUCHI, Yusaku, and Jun SAITŌ

- 2003 "Reapportionment and Redistribution: Consequences of Electoral Reform in Japan." *American Journal of Political Science* 47 (4): 669–82.

JONES, Philip Edward

- 2012 "Which Buck Stops Here? Accountability for Policy Positions and Policy Outcomes in Congress." *Journal of Politics* 73 (3): 764–82.

KITAYAMA Toshiya

- 2003 "Doken kokka Nihon to shakaishugi no shoruikei" [Japan as a Construction State and the Pattern of Capitalism]. *Leviathan* 32: 123–46.

KOBAYASHI, Yoshiaki

- 2012 *Malfunctioning Democracy in Japan: Quantitative Analysis in a Civil Society*. Lanham, MD: Lexington Books.

KRAUSS, Ellis S., and Robert PEKKANEN

- 2004 "Explaining Party Adaptation to Electoral Reform: The Discreet Charm of the LDP?" *Journal of Japanese Studies* 30 (1): 1–34.

MANIN, Bernard, Adam PRZEWORSKI, and Susan C. STOKES

- 1999 "Elections and Representation." In *Democracy, Accountability and Representation*, Adam Przeworski, Susan C. Stokes, and Bernard Manin, eds., 29–54. Cambridge: Cambridge University Press.

MARAVALL, José María

- 2010 "Accountability in Coalition Governments." *Annual Review of Political Science* 13: 81–100.

MCDONALD, Michael D., and Ian BUDGE

- 2005 *Elections, Parties, Democracy: Conferring the Median Mandate*. New York: Oxford University Press.

OHMURA, Hanako

- 2012 *Nihon no makuro seitai: Gendai Nihon ni okeru seiji daihyō no dōtaiteki bunseki* [The Japanese Macro Polity: An Analysis of Dynamic Representation in Japan]. Tokyo: Bokutaku-sha.



- PADORÓ I MIQUEL, Gerald, and Erik SNOWBERG  
 2012 "The Lesser Evil: Executive Accountability with Partisan Supporters." *Journal of Theoretical Politics* 24 (1): 19–45.
- PERSSON, Torsten, Gerard ROLAND, and Guido TABELLINI  
 1997 "Separation of Powers and Political Accountability." *Quarterly Journal of Economics* 112 (4): 1163–1202.
- PITKIN, Hanna F.  
 1967 *The Concept of Representation*. Berkeley, CA: University of California Press.
- POWELL, G. Bingham Jr.  
 2000 *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. New Haven: Yale University Press.
- REED, Steven R.  
 2005 "Japan: Haltingly Toward a Two-party System." In *Politics of Electoral Systems*, Michael Gallagher and Paul S. Mitchell, eds., 277–94. New York: Oxford University Press.
- SAITŌ, Jun  
 2011 *Jimintō chōki seiken no seiji keizaigaku: Rieki yūdō seiji no jiko mujun* [The Political Economy of the LDP Regime: The Paradox of Politically Induced Profit]. Tokyo: Keiso Shobo.
- SATTLER, Thomas, John R. FREEMAN, and Patrick T. BRANDT  
 2008 "Political Accountability and the Room to Maneuver: A Search for a Causal Chain." *Comparative Political Studies* 41 (9): 1212–39.
- SCHEINER, Ethan  
 2006 *Democracy without Competition in Japan: Opposition Failure in a One-Party Dominant State*. Cambridge: Cambridge University Press.  
 2008 "Does Electoral System Reform Work? Electoral System Lessons from Reforms of the 1990s." *Annual Review of Political Science* 11: 161–81.
- SIMS, Christopher A.  
 1987 "A Rational Expectations Framework for Short-run Policy Analysis." In *New Approaches to Monetary Economics*, William Barnett and Kenneth Singleton, eds., 293–310. New York: Cambridge University Press.
- SIMS, Christopher A., and Tao A. ZHA  
 1995 "Error Bands for Impulse Responses." No. 1085, Cowles Foundation Discussion Papers from Cowles Foundation for Research in Economics, Yale University.  
 1998 "Bayesian Methods for Dynamic Multivariate Models." *International Economic Review* 39 (4): 949–68.  
 1999 "Error Bands for Impulse Responses." *Econometrica* 67 (5): 1113–56.
- STEVENSON, Randolph T.  
 2001 "The Economy and Policy Mood: A Fundamental Dynamic of Demo-

cratic Politics?" *American Journal of Political Science* 45 (3) (July): 620–33.

STIMSON, James A.

1999 *Public Opinion in America: Moods, Cycles, and Swings*. 2nd edition. Boulder, CA: Westview Press.

STIMSON, James A., Michael B. MACKUEN, and Robert S. ERIKSON

1995 "Dynamic Representation." *American Political Science Review* 89 (3): 543–65.

TAVITS, Margit

2007 "Principle vs. Pragmatism: Policy Shifts and Political Competition." *American Journal of Political Science* 51 (1): 151–65.

VLAICU, Razvan

2008 "Executive Performance under Direct and Hierarchical Accountability Structures: Theory and Evidence." Paper presented at the annual meeting of the MPSA Annual National Conference, Chicago, IL, 3 April. [http://citation.allacademic.com/meta/p265644\\_index.html](http://citation.allacademic.com/meta/p265644_index.html).